

**REMARKS**

Claims 1-22 are currently pending in the subject application and are presently under consideration. Claims 1, 15, 17, 20, 21, and 22 have been amended herein. A listing of all claims can be found at pages 2-5. The below comments present in greater detail distinctive features of applicants' claimed invention over the cited art that were conveyed to the Examiner over the telephone on April 10, 2008.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

**I. Rejection of Claims 1, 5-7, 13-17 and 19-22 Under 35 U.S.C. §103(a)**

Claims 1, 5-7, 13-17 and 19-22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bates *et al* (U.S. Appln. No. 2003/0221185) in view of Bates *et al* (US 7,251,808, referred to as Bates\_2). This rejection should be withdrawn for at least the following reasons. Neither of the cited references, alone or in combination, teach or suggest all limitations of the subject claims.

Independent claim 1 recites *a computer-implemented attributed debugging system, comprising a debugger ... and an expression evaluator that evaluates an attribute associated with the computer software application according to an attribute definition, and presents debug information ... in accordance with the attribute definition, wherein the attribute definition declaratively indicates how the debug information is presented in a developer-customizable format.* Independent claims 17, 20, 21, and 22 recite similar limitations. Utilization of the attribute definition to evaluate an attribute allows for the manipulation of debug information by allowing control of the presented data. (See e.g., pg. 7, Ins. 6-7.) Thus, the attribute definition can be utilized to control a top-level value that should be presented, whether a field or property should be presented at all, what value should be shown, whether to fully expand the debug information and/or a more descriptive name or type information. (See e.g., pg. 7, Ins. 10-20.) In an example, a DebuggerBrowsableAttribute can determine how and/or whether a type or member is displayed and/or a DebuggerDisplayAttribute can control what is displayed for a given calls or field. (See e.g., pg. 9, Ins. 10-11 and pg. 10, Ins. 17-18.) As another example, a DebuggerTypeProxyAttribute can specify a particular viewer with the type on which it occurs.

(*See e.g.*, pg. 12, lns. 27-32.) The cited references, alone or in combination, do not teach nor suggest such novel features.

Bates *et al.* relates to displaying a value of a variable and comments associated with the variable. (*See e.g.*, Abstract.) The variable information can include comments, declaration location, use information, and next instances. (*See e.g.*, pg. 4 ¶[0042].) An “attribute” can be set for a variable in fields. (*See e.g.*, pg. 6, ¶[0064].) These fields are flags whose value describes an attribute. (*See e.g.*, pg. 4, ¶[0047].) The attributes can be displayed utilizing an indicator such as G, S, I, R, C, P. (*See e.g.*, *id.*) However, this is not an expression evaluator that evaluates an attribute associated with the computer software application according to an attribute definition nor wherein the attribute definition declaratively indicates how the debug information is presented in a developer-customizable format, as claimed. Instead, it is simply an indication of a field that is displayed. In the Office Action, it is conceded that Bates *et al.* does not teach or suggest the debug information is presented in a developer-customized format and Bates\_2 is relied upon. However, Bates\_2 does not make up for the aforementioned deficiencies of Bates *et al.* Bates\_2 relates to displaying user-selected fields or user-programmed fields for the variable or the record. (*See e.g.*, col. 3, lns. 52-55.) However, Bates\_2 is silent regarding the attribute definition, as claimed. Therefore, the combination of Bates *et al.* and Bates\_2 does not teach or suggest all claim limitations.

Based on at least the above, the cited references, alone or in combination, do not teach or suggest all limitations recited in the independent claims and, therefore, the claims that depend there from. Accordingly, it is respectfully requested that this rejection be withdrawn and the subject claims allowed.

## **II. Rejection of Claims 2-4 and 8-12 Under 35 U.S.C. §103(a)**

Claims 2-4 and 8-12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bates *et al.* in view of Bates\_2 as applied to claims 1 and 7 above, and further in view of Dandoy (U.S. Appln. No. 2004/0230954). This rejection should be withdrawn for at least the following reasons. None of the cited references teach or suggest all claim limitations.

The subject claims depend from independent claim 1 and, as discussed above, the combination of Bates *et al.* and Bates\_2 does not teach nor suggest all limitations of claim 1 and Dandoy does not make up for these deficiencies. Dandoy relates to a debugging a user interface

but is silent relating to an expression evaluator that evaluates an attribute associated with the computer software application according to an attribute definition nor wherein the attribute definition declaratively indicates how the debug information is presented in a developer-customizable format, as claimed. Therefore, the combination of Bates *et al.*, Bates\_2, and Dandoy does not teach or suggest all limitation of independent claim 1, and therefore, the claims that depend there from.

Accordingly, based on at least the above, this rejection should be withdrawn.

**CONCLUSION**

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP578US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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